State of California **Employment Training Panel**

M e m o r a n d u m

To:	Panel Members	Date:	April 24, 2003
From:	Creighton Chan, Manager Peter DeMauro, General Counsel	Analyst:	D. Woodside
Subject:	One-Step Agreement for **Intel Corporation** (www.intel.com)		

CONTRACTOR:

- Training Project Profile: Retraining: companies with out-of-state competition
- Legislative Priorities: Stimulating Exports/Imports
  Promotion of California's Manufacturing Workforce
  Moving to a High Performance Workplace
  Workers In Danger of Being Displaced
- Type of Industry: Manufacturing
- Repeat Contractor: No
- Contractor's Full Time Employees:
  - Company Wide: 83,400
  - In California: 14,400
- Fringe Benefits: Yes
- Union Representation: No
- Name and Local Number of Union representing workers to be Trained: N/A

CONTRACT:

- Program Costs: $1,695,551
- Substantial Contribution: $0
- Total ETP Funding: $1,695,551
- In-Kind Contribution: $6,300,000
- Reimbursement Method: Fixed-Fee
- Counties Served: Santa Clara, Sacramento, Orange, and San Diego
- Duration of Agreement: 24 months

SUBCONTRACTORS:

PriceWaterhouseCoopers, Los Angeles, California, will receive 10 percent of the Agreement amount earned for the provision of administrative services.

THIRD PARTY SERVICE:

PriceWaterhouseCoopers assisted with the completion of the ETP application and Agreement documents for a flat rate of $30,000, plus expenses.

NARRATIVE:

Intel Corporation is eligible for standard ETP retraining under Title 22, California Code of Regulations, Section 4416(b) because it is a manufacturer.

Founded in 1968, Intel Corporation (Intel) manufactures semiconductor chips, and various computer components, networking and communications products including the Pentium 4 microprocessor. Intel's developments in semiconductor design and manufacturing have made it possible to decrease the size of circuits etched into silicon which allows more chips to be made from each silicon wafer. The result is smaller and faster microprocessors and other semiconductor products that consume less power and cost less to manufacture. This makes possible inexpensive computers with the power to perform multiple tasks at once, display high quality color pictures and digital films, recognize speech, play digital music, surf the Internet, and perform all the other tasks of a modern computer. Intel reports that it spent $3.8 billion in 2001 on research and development with the goal to become a major supplier to the world Internet economy.

Headquartered in Santa Clara, Intel employs 14,400 Californians who work primarily in research and development and in support of operations worldwide. This proposal seeks assistance from ETP so Intel can provide more training on a faster timetable for its California employees. The added training supports Intel's redeployment system, an alternative to layoffs in times like the present when business slows and companies layoff workers.

Redeployment, as used by Intel Corporation, is the movement of employees to areas of greater return when there has been a change in business conditions. Since the early 1990's, Intel Corporation representatives' report that its redeployment program has provided job search time, training, and other support for eligible employees who have been affected by such changes. The goal is to help employees find other jobs within Intel when their own jobs are eliminated. Those with the most varied skills are most likely to find new jobs. The training proposed in this application will help employees cross-train, and otherwise broaden their skills so they can remain employed at Intel.

Retraining is proposed for 1,837 technology-manufacturing technicians, analysts, and managers employed by Intel divisions located in Santa Clara, Sunnyvale, Sacramento, Folsom, Irvine, and San Diego. The ETP-funded training program will include Manufacturing, Computer, Continuous Improvement, and Business Skills training.

NARRATIVE: (continued)

Manufacturing Skills Training

Six hundred of the trainees work at Intel's California Technology Manufacturing Center in Santa Clara, which, according to company representatives, is one of the most advanced semiconductor fabrication facilities in the world. It serves as a testing and development site for new semiconductor products and processes. The facility is a large, class-1 clean room housing 50 to 60 different multi-million dollar semiconductor manufacturing machines, known as "tools" that perform these basic functions: (1) depositing a conductive material on a wafer; (2) etching to selectively remove material from the surface of a wafer; (3) polishing; (4) inspecting; and (5) testing.

Trainees will learn to operate equipment that they have not previously been certified to operate or earn a certification permitting them to perform advanced maintenance and troubleshooting functions on equipment they have operated in the past. A trainer is assigned to each trainee during the entire training process.

There are three levels of certification on each tool, or piece of equipment, requiring separate periods of training: Level 1 Certification is a combination of competencies in the process, operations and equipment categories. Tasks do not require extensive judgment and are frequently performed on a repetitive basis. These certifications are primarily used to run wafers through the toolsets and monitor the output of those toolsets. Level 2 Certification has separate competencies in each category to allow a technician to specialize in any one of these categories. Tasks are complex in nature and frequently performed. These certifications support scheduled preventative maintenance on the tools. Level 3 Certification has separate competencies in each category, except operations, which is not included in this training program. Tasks are highly complex in nature and infrequently performed. These certifications support unforeseen repairs and require advanced troubleshooting skills for unscheduled tool downtimes.

Manufacturing Skills will be also be provided to employees not working at the Santa Clara site but who need to understand the design, engineering and manufacturing processes so they can support these processes. This training meets the Panel's standard definition of classroom/laboratory training wherein trainees will not produce products or services during ETP-funded training.

The remaining trainees not employed at the California Technology Manufacturing Center in Santa Clara will be technicians, analysts, and managers working in operations finance, e-Business, and information technology functions at Intel. Operations finance provides financial analysis for operating units of Intel. The division provides business analyses and recommendations in a variety of areas including pricing, capital analysis, make vs. buy decisions, product return on investment, cost reduction, and expense controls. Employees are hired to work in specific jobs and normally acquire highly specific skills. For example, one finance analyst may be hired to prepare cost analyses; a second may be hired to prepare revenue forecasts. The training proposed in this application will enable these specialists to learn additional skills so they can move to new areas within the company and avoid layoffs.

Information technology staff provides hardware, software, and computing support for Intel's own operations. The division performs research, design, engineering and support for the information infrastructure throughout Intel worldwide. E-Business Group employees use the company's information technology infrastructure to develop e-business applications. For example, the group uses technology to manage business processes around the world on a common enterprise resource planning system. Common systems mean California employees must learn to work more closely with employees around the world and learn common processes and procedures.

NARRATIVE: (continued)

Computer Skills training will teach employees to set up and operate hardware and software computer support systems within the company. Training includes computer programming, data management, and technical training in various software applications including SAP, Essbase, People Soft, and Microsoft's new .NET system.

Continuous Improvement Skills will teach employees to work collaboratively, and includes team skills, communication skills, process control techniques, and quality systems training.

Business Skills will cover planning, project management, and cross training in financial areas; training in new standard processes that are being applied to company financial systems around the world; and technical training so analysts can better understand the businesses for which they are working.

All training will be either classroom/laboratory or CBT training and each trainee will receive between 24 to 200 hours of classroom/laboratory and 0 – 8 hours of CBT from the various types of training outlined above.

Supplemental Nature of Training

Intel has certified in writing that the proposed training would not happen in the form and manner and on the planned timetable without assistance from ETP. Funds provided by ETP will be used to increase both the number of training hours and number of people to be trained by Intel during the contract period. Intel's training budget for 2003 in California exceeds $45 million. On-going training at Intel includes new hire orientation, safety, computer skills, system upgrades, manufacturing, Intel processes, management, and general business processes. Intel intends to use funds earned under this Agreement to increase its training budget. While ETP-funded training is similar to training included in Intel's on-going training system, ETP assistance will enable Intel to provide more training so employees are more likely to have the skills to be successfully redeployed.

In-Kind Contribution

Intel Corporation's total in-kind contribution will be $6,300,000. This amount reflects $5,300,000 in wages to be paid to employees while attending ETP-funded training, and $1,000,000 in additional direct training costs for in-house trainer salaries in excess of the amount covered by ETP funds.

COMMENTS:

All trainees in this project meet the Panel definition of frontline worker under Title 22 California Code of Regulations, Section 4400(ee) except for 25 managers.

Intel Corporation has certified in writing that no senior policy executives will be enrolled in any ETP-funded training.

Laboratory Training

A large portion of this proposal is to provide training in manufacturing skills on semiconductor manufacturing machines located in a clean-room environment. Due to the expense and variability of the equipment, it is not possible for the company to establish a non-productive laboratory for training. As a result, "laboratory" training will take place on the production floor. Production will take place at a reduced percentage during the training, and the trainer is responsible for the production, not the trainee. The trainer is with the trainee for the entire training period. Company procedures require that the trainee remains under the direct and close supervision of the trainer until training on a piece of equipment is complete and the trainee has been certified to operate the equipment independently.

COMMENTS: (continued)

Title 22, California Code of Regulations, Section 4400(y)(2) defines "laboratory training" as "'hands-on' instruction or skill acquisition conducted in a non-productive environment, or simulated work setting, under the direct training of a laboratory trainer that may require the use of specialized equipment or facilities by the trainee." The Panel's intent in using the "non-productive environment" criteria in the regulation was to ensure that a trainee was not using lab time to make the product or service that constitutes the employer's normal business product which would be sold for profit.

In this proposal, although the trainer will initially demonstrate the operation of the equipment to the trainee, the trainee must eventually operate the equipment on the production floor during the training in order to become certified to operate the equipment independently. Since the trainees will be operating manufacturing equipment during production time, this training will occur in a productive environment and does not meet the definition of laboratory training. It appears that the trainees will be using lab time to make the product that Intel normally sells for a profit. The training can be classified as non-productive if Intel agrees to destroy all products made by trainees during training. Without such agreement, the proposed training is actually structured-on-site training.

Intel contends that the proposed training is laboratory training and requests that the Panel approve the proposed manufacturing skills training under the proposed revised definition of laboratory training which the Panel directed staff to develop at February's meeting. Specifically, at the February 2003, Panel meeting, the Panel directed staff to initiate the regulatory process to revise the definition of laboratory training to allow a maximum of 10 percent of the instructor's time to review and advise trainees in training-related work products that are produced at the trainees' worksite. The regulatory process for this amendment has not been commenced yet; thus the revision is not yet effective.

However, even if the revised definition were effective at this time, the proposed laboratory training still does not meet the revised definition of laboratory training. Intel states it cannot differentiate the time spent by the trainer and trainees operating the equipment and that it cannot determine the amount of time each trainee will actually spend operating the equipment. Consequently, the proposed laboratory training will not comply with the 10 percent maximum of the instructor's time in the revised definition. Furthermore, the purpose of the revision is to allow trainees to bring work products, which were produced at their worksite outside of training hours, into the laboratory setting to review with the instructor. In this case, the trainees would not be bringing already produced work product into the laboratory; rather, the trainees would actually be making the work product during laboratory training. For these reasons, the proposed training does not meet the revised definition of laboratory training.

PROPOSED ACTION:

Staff recommends that the Panel: (1) approve the proposed training, with the exception of manufacturing skills training for the 600 trainees at the Santa Clara site, in this One-Step Agreement if funding is available and the project meets Panel priorities; and (2) deny the proposed manufacturing skills training for 600 trainees because the training is actually structured-on-site training. Staff's recommendation is based on the company's commitment to retrain employees in high demand skills resulting in the redeployment of more Intel California workers even as jobs change or are eliminated.

TRAINING PLAN:

Grp/Trainee Type	Types of Training	No. Retain	No. Class/Lab Videocnf. Hrs	No. CBT Hrs	No. SOST Hrs.	Cost per Trainee	Hourly Wage after 90 days
Job Number 1 Retrainees	Menu: Business, Continuous Improvement, Manufacturing, and Computer Skills	1,837	24-200	0-8	0	$923	$12.88-$65.00

	Range of Hourly Wages $12.88-$65.00	
	Prevalent Hourly Wage $33.29	
	Average Cost per Trainee $923	
Health Benefit used to meet ETP minimum wage: N/A. Although the company pays health benefits for its employees, the hourly contribution is not being used to meet ETP minimum wage requirements.	Turnover Rate 7.7%	% of Mgrs & Supervisors to be trained: 1.4%

Intel Corporation
Menu Curriculum

Hours

Class/lab

24-200

Type of Training: Manufacturing Skills (to be conducted at Santa Clara clean room site).

Tool operation
Troubleshooting
Standard operating procedures
Physical and chemical properties
Variation
Photolithography scanners and steppers
Coat/develop tracks
Ion implanters
Diffusion furnaces
Rapid thermal processors
Chemical vapor deposition tools
Physical vapor deposition tools
Wet clean/wet etch chemical benches
Plasma dry etch tools
Electrochemical platers
Scanning electron microscopes
Overlay measurement tools
Film thickness measurement tools
Defect inspection tools
Photoresist ashers
Chemical mechanical polishers
Optical inspection tools

Type of Training: Manufacturing Skills (for all frontline workers)

Intel products
Manufacturing overview
Design overview
Engineering overview
Basic architecture
Components
Mobile systems

Type of Training: Computer Skills

Web applications
Programming languages
Programming systems
Enterprise resource planning
Standard operating procedures
Data management
Personal Computer applications

Type of Training: Continuous Improvement Skills

Communications
Team skills
Developing skills
Process control
Project management
Change process
Quality systems

Type of Training: Business Skills

Project accounting
Business Planning
Financial controls
Project management
Risk management
Supplier management
Customer relations

Intel Corporation
Menu Curriculum—Computer Based Training

CBT Hours

0-8

Type of Training: Manufacturing Skills

Intel products
Manufacturing overview
Design overview
Engineering overview
Basic architecture
Components
Mobile systems

Type of Training: Computer Skills

Web applications
Programming languages
Programming systems
Enterprise resource planning
Standard operating procedures
Data management
PC applications

Type of Training: Continuous Improvement Skills

Developing skills
Process control
Project management
Change process
Quality systems

Type of Training: Business Skills

Project accounting
Business Planning
Financial controls
Project management
Risk management
Supplier management
Customer relations